REMARKS

Claims 1, 3-21 and 23-55 were pending before amendment with claims 1, 12, 17, 24, 28, 29 and 43 being independent. Claim 1 has been amended. Claim 3 has been cancelled. Claims 56-63 have been added. Applicant's specification fully supports the subject matter of the newly added claims. For example, the claimed "accelerometer" and "gyroscope" are described at least on page 19, lines 25-32. No new matter has been added. Reconsideration and allowance of all pending claims are respectfully requested.

Allowable Subject Matter:

Applicants thank the Examiner for allowing claims 29, 32-42 and 54. Applicants also thank the Examiner for indicating claims 3, 4, 20, 21, 47 and 48 as being allowable if rewritten in independent form. These claims are retained. While the Examiner states claims 36 and 37 as allowable (*see* Office Action Dated October 5, 2006 at 7), Applicants believe this to be in error since claims 32-42 depend from allowed claim 29. The Office Action Summary correctly identifies claims 29, 32-42 and 54 as allowed claims.

Rejections Under 35 U.S.C. § 102 (e):

Claims 1, 5, 6, 12-13, 17-19, 24-28, 30-31, 43, 49-53 and 55 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,909,424 to Liebenow et. al. ("Liebenow").

Claim 1 and its dependent claims

While Applicants disagrees with the Examiner's basis for his rejection, claim 1 has been amended to include all features of cancelled claim 3 to expedite the prosecution of the present application. Since claim 3 was identified by the Examiner as allowable subject matter, amended claim 1 is allowable over Liebenow for at least incorporating the allowable subject matter. Claims 4-11, 30-31 and 49 depend from claim 1 and thus are patentable over Liebenow for at least the reason similar to claim 1.

Claim 12 and dependent claims

Claim 12 is allowable over Liebenow because, among other reasons, Liebenow fails to teach each or suggest and every feature of claim 12. In particular, Liebenow fails to teach ***a second surface having one or more input elements, wherein at least one of the input elements of the second surface having one or more selectable active areas configured to be manipulated by one or more of the human user's fingers, each selectable active area configured to selectively map to a different shifting function, wherein manipulation of one of the selectable active area causes the text symbol function of the one or more input elements of the first surface to change*** as recited in claim 12. In contrast to the claimed features of claim 12, Liebenow teaches that the back surface of the device includes a conventional keyboard or touch pad mimicking a conventional keyboard designed to be manipulated by user's fingers. (*See* Liebenow at col. 4, ll. 33-43; col. 8, ll. 45-67; and col. 9, ll. 53-67.) "Turning now to FIGS. 2, 3 and 4, the input device 130 may be composed of a keyboard 132 having a plurality of key configuration....In this manner, the fingers of the user's left and right hands 122 & 124 may be positioned over the keys 134 of each key range 136 & 138 in a manner allowing the user of conventional touch-typing techniques." (*See* Liebenow at col. 4, ll. 33-48 and FIGS. 2-4.) The front surface of the device in Liebenow include keys corresponding to "shift", "space bar", "Ctrl", "Alt", etc. (*See* Liebenow at col. 5, ll. 36-64 and FIGS. 1, 3-4.) Thus, the input elements of the second surface in Liebenow are not ***selectively map to a different shifting function, wherein manipulation of one of the selectable active area causes the text symbol function of the one or more input elements of the first surface to change*** as recited in claim 12. Selecting one of the keys in the keyboard 132 in Liebenow does not cause the ***causes the text symbol function of the one or more input elements of the first surface to change***. In fact, the input elements of the first surface in Liebenow are set to one of the "shift", "space bar", "Ctrl", "Alt", etc. (*see* Liebenow at col. 5, ll. 36-64 and FIGS. 1, 3-4), which do not change when one of the input elements in the second surface is manipulated by the user's finger.

This is not surprising since Liebenow also fails to teach ***wherein the plurality of input elements of the first surface and the one or more input elements of the second surface are arranged so as to substantially optimize a biomechanical effect of the human user's hand.*** Optimizing the biomechanical effects of the human user's hand includes optimizing human thumb/finger opposition. (*See* Applicant's Specification at least at pg. 4, ll. 18-24; pg. 5, ll. 15-21; pg. 11. ll. 11-13; pg. 14, ll. 10-32; pg. 19, 13-18.) For example, a ***selectable active area*** on the second surface configured to be manipulated by user's fingers through a sliding motion to activate a shift function as recited in claim 12 optimizes the human thumb/finger opposition. In contrast, Liebenow teaches use of discrete keys (even when using a sensor pad) designed to be manipulated by rigid tapping or pushing motions of the fingers. This does not optimize the biomechanical effects of the human user's hand since combining tapping motion with the thumb and the fingers as taught in Liebenow is difficult and inefficient to accomplish. In fact, Liebenow fails to teach or suggest that ***the plurality of input elements of the first surface and the one or more input elements of the second surface are arranged so as to substantially optimize a biomechanical effect of the human user's hand*** as recited in claim 12. While Liebenow teaches that "[a]ny or all of the front and back surfaces 104 & 106, the left and right side surfaces 108 & 110 and/or the top and bottom surfaces 112 & 114 may further be shaped to provide a comfortable gripping area for the user's hands," (*see* Liebenow at col. 4, ll. 13-16) a comfortable grip as disclosed in Liebenow is not equivalent to ***optimizing a biomechanical effect of the human user's hand*** as recited in claim 12. The comfort level of a grip is not relevant to the arrangement of the input elements of the first and second surfaces to ***substantially optimize a biomechanical effect of the human user's hand*** as recited in claim 12.

For at least these reasons, claim 12 is allowable over Liebenow. Claims 13-16 and 50 depend from claim 12 and thus are allowable over Liebenow for at least the same reasons.

Claim 17 and its dependent claims

Claim 17 is allowable over Liebenow because, among other reasons, Liebenow fails to teach or suggest each and every feature of claim 17. In particular, Liebenow fails to teach ***disposing on a second surface a second input assembly having one or more input elements configured to be manipulated by one or more of the human user's fingers, wherein at least one of the input elements of the second input assembly is further configured to map to more***

than one input function associated with a selected one of the plurality of applications. To illustrate the claimed mapping to more than one input function, Application's specification describes in one aspect that an input function is a character that can be produced upon depressing one button in the front input assembly (e.g., "P" from the "7PQRS" key), and that the same key can produce multiple characters (7, P, Q, R, S) *while executing the same application and the same data input mode*, simply by using the input elements in the back as shift keys to index into the "7PQRS" string to select one of the possible characters. (*See* Applicant's Specification at pg. 6, ll. 8-12; pg. 14, ll. 6-27.)

In contrast to claim 17 and as set forth with respect to claim 12 above, Liebenow teaches a standard keyboard having discrete keys designed to be manipulated by a user's fingers. (*See* Liebenow at col. 4, ll. 33-43; col. 8, ll. 45-67; col. 9, ll. 53-67; and FIGS. 1, 2, 4, 7 and 8.) The discrete keys of the standard keyboard in Liebenow are not mapped to ***more than one input function associated with a selected one of the plurality of applications*** as recited in claim 17. Liebenow teaches assigning one text or numeric character per key as long as the same application is executed in the same input mode. While the entire mapping of every key can be changed, for example from QWERTY mode to a DVORAK keyboard mode, even after the change, each key is assigned to only a single character. (*See* Liebenow at col. 15, ll. 12-20.) In addition, while Liebenow allegedly teaches a word processing application in FIG. 15 and a calculator application in FIG. 16, each key is still assigned to a single character only in each application. It is not surprising to see only a single input function assigned to each key in Liebenow since Liebenow teaches a standard full-size keyboard, which includes a key for each input character, i.e., a one to one mapping.

Similarly, Liebenow fails to teach ***wherein at least one of the input elements of the first input assembly is further configured to selectively map to one or more input functions associated with the selected application*** as recited in claim 12. The input elements on the front surface in Liebenow include keys corresponding to "shift", "space bar", "Ctrl", "Alt", etc. (See Liebenow at col. 5, ll. 36-64 and FIGS. 1, 3-4.) These keys in Liebenow only allow a single

function for an application. For example, the "shift" key in the word processing application in FIG. 15 of Liebenow allows for a single input function. Further, as set forth with respect to claim 12 above, the input elements on the front and back surfaces in Liebenow fails to teach ***substantially optimize a biomechanical effect of the human user's hand*** as recited in claim 17.

For at least these reasons, claim 17 is patentable over Liebenow. Claims 18-21, 23 and 51 depend from claim 17 and are patentable over Liebenow for at least the same reasons.

Claim 24 and its dependent claims

Claim 24 is allowable over Liebenow because, among other reasons, Liebenow fails to teach or suggest each and every feature of claim 24. In particular, Liebenow fails to teach ***wherein at least one of the input elements is further configured to map to a plurality of symbols in a data input mode, wherein each of the plurality of symbols is associated with a unique index position identifier, and a second surface having one or more selection elements configured to be manipulated by one or more of the human user's fingers, wherein each selection element corresponds to one of the unique index position identifiers*** as recited in claim 24. The input elements and the selection elements as recited in claim 24 are designed ***for inputting data on a hand-held electronic device***. The hand-held electronic device as recited in claim 24 has input elements that are configured to ***map to a plurality of symbols in a data input mode***. In contrast to claim 24, Liebenow teaches a standard full-sized keyboard having a key for each character, i.e., it discloses a one for one correspondence between a key and a corresponding character. Thus, Liebenow does not disclose or suggest assigning multiple character symbols to at least one key. In addition, while Examiner states that Liebenow teaches the claimed features of claim 24, the cited portions of Liebenow fails to support such an assertion. (*See* Liebenow at col.4, ll. 33-43; col. 8, ll. 45-67, and col. 9, ll. 53-67.) The portions of Liebenow cited by the Examiner describes a standard full-sized keyboard, which does not assign multiple symbols to at least one key. Simply put, Liebenow does not disclose or suggest these claimed features.

Further, Liebenow teaches input elements (individual keys of the keyboard) on the back surface designed to be manipulated by user's fingers (*see,* Liebenow at FIGS. 1-4) and not ***selection elements*** as recited in claim 24. Therefore, even if the "shift", "CTRL", etc. keys on the front surface could reasonable be construed as selection elements (which is not conceded), Liebenow teaches that these keys are designed to be manipulated by the user's thumbs and not

the fingers as recited in claim 24. This is not surprising since Liebenow also fails to teach or suggest the claimed ***wherein the plurality of input elements and the one or more selection elements are arranged to substantially optimize a biomechanical effect of the human user's hand***. For reasons similar to claim 12 above, the device in Liebenow is not designed to substantially optimize a biomechanical effect of the human user's hand.

For at least these reasons, claim 24 is patentable over Liebenow. Claims 25-27 and 52 depend from claim 24 and are patentable over Liebenow for at least the same reasons.

Claim 28 and its dependent claim

Claim 28 is allowable over Liebenow because, among other reasons, Liebenow fails to teach or suggest each and every feature of claim 28. In particular, Liebenow fails to teach ***wherein at least one input element is mapped to more than one text function, and one or more selection elements in a finger-manipulated input assembly*** as recited in claim 28. As set forth with respect to claim 17 above, the keys in Liebenow is assigned to produce a single character and thus a single text function. Also, as set forth with respect to claim 24 above, the "shift" and "CTRL" keys are not arranged in ***a finger-manipulated input assembly*** as recited in claim 28 since the device in Liebenow is not designed to ***substantially optimize a biomechanical effect of the human user's hand*** as recited in claim 28.

For at least these reasons, claim 28 is allowable over Liebenow. Claim 53 depends from claim 28 and is also allowable over Liebenow for at least the same reasons.

Claim 43 and dependent claims

Claim 43 is allowable over Liebenow for at least reasons similar to claim 17 above. In particular, Liebenow fails to teach or suggest the claimed ***disposing on a first surface a first input assembly having a plurality of input elements configured to receive input from a human user's hand through manipulation of the plurality of input elements, wherein at least one of the input elements of the first input assembly is further configured to map to more than one input function associated with a selected one of the plurality of applications; disposing on a second surface a second input assembly having one or more input elements configured to be manipulated by one or more of the human user's fingers, wherein at least one of the input elements of the second input assembly is further configured to selectively map to one or more input functions associated with the selected application and mapping the set of functions of***

the selected application to the one or more input elements of the first input assembly and the second input assembly to substantially optimize a biomechanical effect of the human user's hand as recited in claim 43. As set forth with respect to claim 17 above, Liebenow teaches a single input function assigned to each key for an application.

For at least these reasons, claim 43 is allowable over Liebenow. Claims 44-48 and 55 depend from claim 43 and are allowable over Liebenow for at least the same reasons.

New Claims 56-63

New claims 56-63 depend from claims 1, 17, 29 and 43, and are allowable over Liebenow for at least the same reasons set forth with respect to claims 1, 17, 29 and 43.

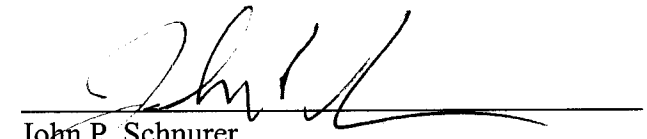
Conclusion

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue, or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this response should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this response, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Claims 1, 4-21 and 23-55 are in condition for allowance, and a notice to that effect is respectfully request. If the Examiner has any questions regarding this response, the Examiner is invited to telephone the undersigned at (858) 678-5070.

Please apply $60 for the one month extension of time fee and any other charges or credits to deposit account 06-1050.

Respectfully submitted,



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John P. Schnurer
Reg. No. 52,196

Fish & Richardson P.C.
12390 El Camino Real
San Diego, California 92130
Telephone: (858) 678-5070
Facsimile (858) 678-5099

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